

Clelia 621

Pilot: Don Liberature

Obs 1: Grant Gilmore

Obs2: Doug Weaver

Date: 09/05/01

Visibility: 30-40'

Depth range: 220-260'

Time: 14:09-16:46

Chapmans Lump 621

Objectives: Filming, Transects and Habitat Assessment

Habitat: Chapman's Reef consists of a series of beautiful *Oculina* ridges. All nine of these ridges were explored on this dive. The first 7 ridges were pretty similar in that they all had abundant live coral growth. Ridge 8 had small live coral head while the 9th ridge had sparse live coral. The only live growth on the 9th ridge was small pieces of *Oculina* growing on the tips of dead rubble.

- Between all of the ridges were troughs. These troughs seem to get wider as the sub progressed towards ridge 9. The amount of live coral in these troughs also diminished as the amount of dead coral rubble increased.
- Ridges 1-7 all had vibrant live *Oculina* especially towards the peaks. Heads of live coral ranged from 3-4' in diameter and were bundled into 5-15' across colonies. Large dead *Oculina* colonies were still intact and many had new live *Oculina* growing on the outer branches.

Invertebrates:

- 30+ long-spined black urchins (*Diadematidae*) were seen scattered all over the reef as well as the rubble areas.
- Yellow and Orange (*Demospongiae*) encrusting sponges covered some of the dead coral.
- Brittle stars (*Ophiuroidea*) were seen hiding under large coral heads.
- Sea cucumbers (*Holothuroidea*) were also scattered over the rubble bottom and by the coral ridges.

Human Impacts:

- 2-3 Reefblock sites, seem to be good habitat for the fish species
- 1 old fish trap (same one seen on dive 620)
- 1 old fishing spool
- 1 old aluminum can
- trash, plastic bag-type thing

Fish: A large variety of fish species were present on this dive. Most of them are very similar to the previous dive, 620.

- The most numerous species were the Anthiids. *Hemathias vivanus* swarmed in the 1000's around the coral heads and dove into them on occasion. *Holanthias martinicensis* were mixed in with this bunch and seemed to be out numbered maybe 10/1. *Holanthias martinicensis* became more abundant as the sub came closer to the ridge 9 were there was

more dead rubble. Meanwhile the numbers of *H. vivanus* decreased. Apparently the *H. vivanus* prefer the large intact heads of coral.

- *Chaetodon aya* and *Chaetodon sedentarias* were present but it was obvious that *C. aya* was the most abundant of the butterfly fish.
- *Holacanthus bermudensis* were seen in groups of 8-12. This site may be a spawning grounds for them.
- A large school of about 150+ *Seriola dumerili* followed the sub throughout the dive hovering both in front and behind the sub. About 5-10 fish in this school were *Seriola rivoliana*.
- One *Acanthurus* sp was seen.

Commercially Important Species:

- **3-5 *Epinephelus drummondhayi***- most were juveniles, one intermediate
- **1- *Epinephelus morio***
- **10-13 *Mycteroperca phenax*** were seen. There were no large aggregations. Rather, just 2-3 individuals seemed to be grouped together at a time. No social interactions or change of color display were observed.
- **3-*Pagrus pagrus*** were spotted swimming together.
- **1-*Epinephelus adscensionis*** was seen hiding around the large *Oculina* heads.

Other Species Observed

S	<i>Acanthurus</i> sp.		<i>Equetus lanceolatus</i>		<i>Paralichthys</i> sp.
A	Anthiinae		<i>Equetus</i> sp.		<i>Plectranthias garrupellus</i>
S	<i>Apogon</i> sp		<i>Equetus umbrosus</i>	F	<i>Plectrypops retrospinus</i>
	<i>Bodianus pulchellus</i>		<i>Equetus iwamotoi</i>	F	<i>Pomacetrus</i> sp.
	<i>Centropristis ocyurus</i>		<i>Gymnothorax moringa</i>		<i>Priacanthus arenatus</i>
	<i>Centropristis striata</i>		<i>Halichores bathyphilus</i>	F	<i>Pristigenys alta</i>
	<i>Centropristis fuscula</i>		<i>Halichores</i> sp	F	<i>Rypticus maculatus</i>
A	<i>Chaetodon aya</i>	A	<i>Hemanthias vivanus</i>	S	<i>Scorpaena</i>
	<i>Chaetodon ocellatus</i>	M	<i>Holacanthus bermudensis</i>		<i>Serranus flaviventris</i>
M	<i>Chaetodon sedentarias</i>	S	<i>Holacanthus ciliaris</i>	M	<i>Serranus phoebe</i>
	<i>Chaetodon</i> sp.	A	<i>Holanthias martinicensis</i>	A	<i>Seriola dumerili</i>
	<i>Chromis cyanea</i>		<i>Holocentrus adscensionis</i>	F	<i>Seriola rivoliana</i>

S	Acanthurus sp.		Equetus lanceolatus		Paralichthys sp.
A	Anthiinae		Equetus sp.		Plectranthias garrupellus
A	Chromis enchrysurus		Holocentrus sp.		Synodus sp
	Chromis scotti		Labridae		Callionymidae
S	Decodon puellaris	F	Liopropoma eukrines		Canthigaster urosticta
S	Diplectrum formosum		Ogcocephalus sp.		

Good shots:

3chip1

1. Large intact dead coral head with 1 juvenile Speckled hind. Perhaps this is a nursery area for these grouper.
37:47
621-1.mpg
621-1.jpg
2. Good shot of the coral with large live Oculina heads.
56:19
621-2.mpg
621-2.jpg

3chip2

3. 15:18Rt Fishing spool with a Blue Angelfish and a Speckled hind in view. Live Oculina is growing on the outer tips of the dead branches
621-3.mpg
621-3.jpg.
4. Ridge 9 with no live coral growth
24:14tape...15:32Rt
621-4.mpg
621-4.jpg

3chip3

5. 00:07
Queen Angelfish with a Scamp also in view on a large live Oculina ridge.
621-5.mpg
621-5.jpg
6. 17:10
Soapfish in the live coral. These species were seen frequently on this reef.
621-6.mpg
621-6.jpg
7. 17:13
Queen Angel and Scamp
621-7.mpg
621-7.jpg

Sit2

8. 05:58

Red porgies and Scamp come out of the woodwork/coral when the lights are turned off on the sub. Multiple live coral heads seen in background.

621-8.mpg

621-8.jpg